

To The Grand Canyon and  
Return.

July 19 — Aug. 7, 1928 —

Vernon Bailey

July 19, 1928

Thurs. July

Journal

Left Washington, D.C. Capitol Limited at 3 PM for the Grand Canyon, at request of the Park Service & Carnegie Inst. to help with their Nature Education program. The request was from Dr. John C. Merriam to especially correlate present fauna & flora with the Geological ages traced up from the bottom of the Canyon to the top but it is a part of the big plan to <sup>get</sup> over to the public a better understanding of natural history and outdoor knowledge and values through the great nature laboratories of our National Parks.

As I see it my best work will be with the park rangers and Nature guides who will keep going any work we can get started there.



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The original conception of  
Dr. Chas. Merriam when he planned  
the San Francisco Mountain Exped.  
in 1889 of a biological section  
of the earth including the life  
zones from Lower Sonoran in  
the Grand Canyon up to Transition  
and Canadian on top of the rim and  
and then through Canadian,  
Hudsonian and Arctic Alpine  
on the San Francisco Peaks just  
south of the canyon and in sight  
of the rim, carrying plant  
and animal life from the  
upper edge of the Tropics  
close to the Arctic climate  
will apply to the present  
studies. In fact we only  
need to put in practice



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and bring out the <sup>results of the</sup> survey are  
made at that time, and that were  
graphically published in  
North American Fauna No. 3.

This fauna will be my text  
and starting point but I  
hope to get plenty of ~~at hand~~  
illustrations of animal and  
plant life in relation to the  
zonal distribution as well as  
to their more appealing interest  
to all of us at first hand  
and close range. Am hoping  
to bring in many of the small  
animals alive to be really seen  
and appreciated by the hotel guests  
and tourists who swarm in  
and out of the Park.



As I leave Washington the day is considered hot, probably  $95^{\circ}$  but clouds are gathering and a thunder storm will probably cool the air before night.

The capital limited is comfortable, smooth and swift so that after an hours sleep I feel like sitting down to a most enjoyable trip.

The country in spite of poor soil is rich in verdure and in places bright with numerous flowers. A pink Silene is the most abundant and conspicuous flower along the railroad where it seems to have gone wild from gardens.



White daisies, yellow and  
elderberry blossoms hold  
parts of the scenery and  
in places a feathery goldenrod  
suggest autumn. Deep orange  
milkweeds (Asclepias)  
show up in spots and many  
other flowers are more or less  
local. Farther along over  
~~scarlet~~ red trumpet cypers  
give a rich touch to the dense  
viney foliage and a few  
purple joe pie weeds are  
beginning to blossom.

On the whole the country is  
beautiful in a quiet way but  
the printing season is here  
and with the brightness of  
spring nor the richness of autumn.

u.

The winter rye and wheat are  
cut and shocked and should be  
in the stack or barn or bin.

Corn is knee high to waist  
high and occasionally a patch  
on low ground looks promising.

Fruit trees, apples and peaches,  
seem to be well loaded in some  
orchards and empty in others.  
Vegetables in home gardens  
are generally ~~scarcely~~ but  
with many exceptions.

Later in the day we  
reach the head of waters of the  
Potomac with the high elevation  
and delightful coolness of  
the mountains.



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7.

July 20

After a delicious cool night wake up in northern Indiana rushing across the hot country and making the fast time necessary for our 18 hour trip between Washington and Chicago. Got up and had breakfast at 8 o'clock only to find we had changed time and it was only 7.

But the country is beautiful and the air delicious. Crops are good vegetation rank and dense. Winter wheat and rye are in the bloom, corn about as tall as on the eastern slope, but dark green and heavy stemmed. Spring wheat and oats are nearly ripe, potatoes and sweet potatoes look promising and fruit trees are generally fruited. It is a good rich fertile farm country.



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where agriculture supports the  
farmer instead of the farmer having  
to support agriculture.

The life zone of this part of the  
trip is Upper Sonoran, about the  
same as at Washington so  
a comparison of the floral and  
faunal elements is not necessary.  
The main differences are in geology  
and soil.

As we near the southern shore of  
Lake Michigan at Gary we enter the  
sand dune formation with its great  
variety of soil and moisture conditions,  
affecting plant and animal life.  
Numerous tule and cat tail marshes  
and sloughs suggest good sites for  
musk-rat farms. The sandy soil near  
the lake shore would also be good for  
cultivated blueberries if properly mixed  
with marsh mud, as the lake protects from frost.

Chicago meets you a little farther out on each trip through it.

I would like to see a map of the city in September of 1870 when I first rode clear through it in a covered wagon, as I remember it 20 miles of deep sandy road between rows of unpainted yellow or gray board houses with wooden sidewalks and no paved streets. It was a long hard days travel at a slow steady pull before we got through the city to a clear place to camp on the prairie beyond, with our two covered wagons, my father and mother, two brothers and two sisters of which I was next to the youngest, a year old.



Today I took the Blue Line  
light seeing bus and rode about  
45 miles around the City Boulevards  
in about 2½ hours.

One hundred years ago Chicago  
consisted of 4 log cabins beside  
Ft. Dearborn which had just  
been rebuilt after the Indian massacre  
of 1812 when the whole settlement  
was destroyed. In 1871 when  
the city burned 70,000 people  
were made homeless, about a quarter  
of the population. Now there are  
over 3,000,000 and still growing.

Went to the Field Museum  
and spent an hour in the groups  
of mammals. Was struck by  
the excellent group of western elk

from the Olympic Mts., collected  
and mounted by Carl E. Akeley,  
and hope I can get a photograph  
of the group for my Oregon Rep.  
The old bull elk has the typical  
short, heavy, web tipped horns  
of Cervus c. roosevelti, very  
like those of the type and the color  
and general characters of the  
species were recognizable  
before I got near enough to  
read the label. The mounting  
and setting are up to Akeley's  
best and would make a wonderful  
picture.

The Akeley memorial hall  
is the finest feature of the museum  
but contains only a part of his work.



Went next to the Art  
 Gallery (Chicago Institute of Art)  
 and greatly enjoyed the rich  
 collections there. It is such a  
 satisfaction to find Rembrants,  
 Gainsboroughs, Corots, Millets,  
 Troyons, Britons, Troyons,  
 Turners, Constables, <sup>French</sup> and such  
 pictures instead of the modern  
 stuff I recently saw at the  
 Detroit Art Gallery. There was  
 a lot of modern work here too  
 but none of a faddist and  
 disgusting type.

The statuary is mostly  
 classical and the more recent  
 work is by Daniel C. French  
 St. Gaudens and some of Rodins  
 best pieces. A full length

statue of Linnaeus is probably the same as the big bronze statue in Lincoln Park but the bus didn't stop to let us see it close by. St. Gaudin's Lincoln in Lincoln Park is fine and stands out in good light which it does not get in the Lincoln Memorial in Washington.

The parks in Chicago are the most numerous and extensive of any city I know and are well equipped with boats for boating and swimming and with play grounds, conservatories, a good zoo, and many educational and recreational features.



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July 21, Daylight at Bosworth,

Mo. and I watched the fields go by till we crossed the Missouri River, then got up and finished breakfast as we pulled into Kansas City at 8 AM. Left Kansas City at 9.

In crossing the Missouri River Valley the rich soil is evident in the good crops where properly cared for and otherwise in the luxuriant growth of weeds. Unfortunately most of the fields produce more weeds than crops and many fields are given up to weeds or used as cow pastures of weeds and grass.

On almost any extensive area seen the yield of crops could be more than doubled with intelligent husbandry of the land and with less manual labor than is now in most cases wasted on it. Farm engineering ought to be a most attractive science.



The Missouri Valley here must be  
 classed to the edge of Lower Sonoran zone.  
 Corn is here high and most of it tumbled  
 out. Wheat and rye are all harvested  
 but mostly in the sheath. There is  
 an unmistakable advance in the state  
 over any place we have crossed  
 in Maryland or Indiana.

It has been a rainy season and crops  
 and vegetation are luxuriant.

Sunflowers are, also corn flowers  
 and black-eyed peas are. There are  
 banks of pink horsemint, white elderberry  
 blossoms, white morning glories and a few  
 other inconspicuous flowers but the  
 flowering season is at its least ebb.

I heard an eastern meadowlark  
 just before crossing the Missouri River  
 but have not yet heard the western.

Thought I heard a dickcissel before  
 crossing the Missouri and heard one  
 perched along the Kaw Valley between



<sup>16</sup>  
Kansas City & Wichita

Early potatoes are ripe and being  
dug and sacked in large fields,  
thousands of acres of them.

Alfalfa is in blossom and  
some fields have been cut.

Geomys hills are common along  
the Kaw River bottoms.

Corn is big and heavily eared.  
Grapes load the trees along the  
river banks. Cottonwoods and  
Willows are abundant and would  
feed thousands of beavers.  
Water is high and muddy in the  
Kaw but no signs of flood  
this year.

There are some fine farms  
Heard the first western meadowlark  
between Topeka and Emporia and  
lots of them farther along.

From Hutchinson west the country  
is higher and drier and crops are largely  
grain and alfalfa. They are pretty good this  
year as there has been plenty of rain.

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With better culture and less weeds they  
would be twice as good. Sunflowers are  
abundant but rather useless weeds as  
they furnish rich seeds for stock and birds  
and mice. Even the tumble weeds have a  
use for they furnish a favorite food for birds  
and mice, and could probably be used for  
ensilage or made to yield a good seed crop.  
Cool and delightful after the rain.



July 22 - Sunday I suppose.

Sawlight on the high mesa country near  
Raton, N.M., and I got up as our pulchritude  
Las Vegas at 6:30 AM.

There has been lots of rain and the country  
is green, the junipers and nut pines  
are full and green and well rounded  
crops are growing - lots of little dry  
farm patches and there are many  
flowers in bloom.

Crossed the Pecos River at Rika  
and had a good view of the old Spanish  
mission of San Miguel just below.  
Not much snow on the south side of  
Pecos Baldy and Tachos Peaks.

Over the summit at Glorieta and  
down to Lamy and into the Rio Grande  
Valley. Dry and dusty outside  
but not uncomfortable - the  
well aired California humidity.

Reached Winslow and Adawana  
before dark.

July 23. Left Williams for the  
Grand Canyon about 6 AM  
and saw the sun rise on the  
desert and San Francisco Mts.  
Watched the range for life zones  
prairie dogs etc - all the  
way and arrived at the edge  
of the Canyon at 8 AM.

Found a room reserved for  
me at the El Tovar Hotel  
and was met by Dr. Fred  
Richt and Edwin M. C. Keck.

Mr. Tillison, park  
superintendent, took Dr. Wright  
and Glen Shurdivant, the park  
naturalist, and we went to  
Havasupai Point where we had  
a wonderful view of that part



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of the canyon as we lunched at the  
rim. The canyon is here  
comparatively narrow & deep  
& has intricate bedrock up  
by side canyons & is very  
impressive from its sheer  
depth & vastness as well  
as its glowing colors &  
clear cut geological layers &  
wonderful carving.

On the way the road runs  
through Pasture Wash, a long  
open sagebrush & salt brush  
valley that would make an ideal  
antelope pasture & has the  
best of antelope foods, three species  
of sagebrush, *Atriplex canescens*,  
*Eurotia lanata*, several species of  
*Chrysothamnus* & numerous

small plants & grasses. An open juniper & Nut pine forest borders both sides & afford shade & shelter.

There is no open water but a drainage tank & cistern supply the ranger station & would water a few antelope and later a larger tank could be added. The conditions would be ideal for antelope while those down in the Indian Gardens are almost dying of the extreme heat, panting violently all the time during the heat of the day. Saw a few tame deer that hang around the hotel El Zorro &



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and eat the flowers in the hotel  
garden but are more attractive  
than all the flowers. They were  
brought over from the north  
side of the canyon and are  
doing well here.

If the range cattle were  
permitted to eat up every green  
thing along this rim of the Park  
could be eliminated we could  
have deer and antelope all  
through these beautiful yellow  
pine and nut pine forests.  
and some day it will come to be.  
Also mountain sheep would come up  
over the rim and be a welcome  
part of the Park fauna.

July 24 Helped the boys set out traps and make up skins to get them started on a collection of mammals, birds and reptiles which they need here.

Gave a brief talk at the little museum building at Yavapi Point on the animals of the Canyon and another in the evening at the camp fire.



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July 25 - Started across the Canyon  
with Supt. <sup>Fillitson</sup> ~~Phillips~~, his wife  
and two children, ~~Glen~~ Dean and  
Jean, and Glen Sturdevant.  
on mule back with a pack mule  
to carry our extra baggage.

Sturdevant and I started ahead  
so we could stop and hunt birds  
and collect plants but were  
overtaken before we reached the  
bottom by the rest of the party.  
Reached the Phantom Ranch  
near mouth of Bright Angel  
Creek about 5:30 and staid  
over night. Set traps and  
prepared specimens in evening and  
caught 3 species of *Peromyscus*  
before we went to bed.

26.

It seemed natural to again be  
in the hot lower savanna zone  
with the pungent odor of Baobabs  
and the thin shade of Merquits  
and to sleep on top of the  
covers on a reserved porch.

The temperature to day was only  
 $106^{\circ}$  in the shade but has been  
 $116^{\circ}$  this summer. The camp  
does not cool off soon at  
night and is rather furnace  
like. I felt the heat more than  
I used to and had to be careful  
not to over exert myself.

Could not drink enough water  
to cool my engine, but later  
acquired the habit.



27  
Found an interesting lot of  
lizards in the canyon including  
one that I never saw before with  
a banded tail like a gopher.

It may be the young of the  
Chuckawalla but is mostly not  
of very different shape.

Could not find a Chuckawalla  
tho they are said to be fairly  
common. Collared lizards were  
common, also *Cnemidophorus*,  
*Sceloporus magister*, and several  
little *Sceloporus* & *Uta* &  
*Holbrookia*. Got all we  
could for specimens & will  
have them identified later.

July 24 - Followed up Bright Angel ~~that~~ Creek through a deep canyon for some miles, then out into more open valley, Lunched at Ribbon Falls, a beautiful spot and continued up the splendid new trail past Roaring Springs to the top at Bright Angel Point and the great hotel, called the Lodge, on the North Rim.

Was delighted to find abundance of *Astragalinus knowltoni* for some miles along the trail opposite Roaring Springs and got photographs and seeds of it.



39  
Got our dinner as early as possible at the hotel and then went out in a big car to see the deer, along the road north about 18 miles through the open valley known as the VT Ranch. Found lots of deer and counted roughly from the car 912 on the way out but did not count near all of them.

They come into the large meadows and open valley to feed on a tiny wild clover that grows in great abundance and should be introduced where ever deer are raised. They were just digging it up by

mouthfuls <sup>30</sup> and had come in  
from the forest all around.  
Were in bunches, sometimes  
a dozen or so birds together  
or a lot of does & fawns  
or all mixed up or scattered  
out. The bucks had full grown  
antlers - the velvet all  
never saw so many sets of  
huge antlers before. It  
seemed as if half the does  
were old bucks but there were  
lots of spotted fawns, <sup>with their mothers</sup> &  
all looked plump & sleek &  
happy & they were not  
afraid of us. A dozen old  
bucks would raise their



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heads and gaze as we as we  
went by on 50 feet away of  
with about as much interest  
as if we were a passing car.  
I saw unless we took the  
time to get them out of the road.  
It was a right the thrill the  
soul of anyone but a hunter.

Caught two porcupines  
on the way and brought a  
young one back to the hotel  
to show the people.

Nearly froze as I went without  
a hat and had to turn up my  
coat collar and tie a handkerchief  
over my head and wished I had a  
mitten under my coat.

32.  
The whole drive except the start  
was through pure Canadian  
zone above 8500 feet and it  
felt good to get back to the hotel  
among the yellow pines at  
8100 feet and feel the warmer  
air come up out of the canyon.  
Slept with all the covers  
over me in a nice warm  
log cabin close to the hotel  
and the porcupine we brought back  
staid quietly behind the stove  
in one corner of our room.



July 24. <sup>3-3</sup> Went out to the Ranger Station and set traps for pocket gophers, shot a chipmunk and woodrat and red squirrel and caught 3 Callospermophilus and in traps set last night by flood light caught 3 Peromyscus m. rufinus, a Neotoma lepida and a Eutamias dorsalis or utahensis.

In afternoon went with the head ranger, Frank Winess to Far View Point some 8 miles east on the rim of Marble Canyon where I could look all over the Painted Desert Country across Marble Canyon, up the canyon of the Little Colorado and have a good view of Navajo Mountain in the distance.

Got some photographs of Ed. Laws of Rancho, one of the park rangers, and found he was a taxidermist and knows a lot of the animals. He told me of about 25 mountain sheep down on this side of the canyon below here that he had seen last winter.

Got Charles Merriam and Glen E. Sturdevant to make up specimens and I worked with them showing them all I could and we completed a nice box full to take back to the other side of the canyon.

In evening gave a talk in



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lecture room. on the animal life of  
the canyon and took the porcupine  
on a table for illustration.  
He behaved nicely and allowed  
the people to stroke his forehead  
very gently. There were probably  
80 people in the audience.

In morning went out with  
Charles Merriam on a nature  
walk with a dozen or 15 people  
and he gave them a lot of good  
information. He is a fine boy  
and people like him but a  
little more enthusiasm would make  
his talks more inspiring.

July 27. - Gathered a few more specimens and started back across the canyon about 10 o'clock and lunched near the overhanging ledge before reaching Roaring Springs. Reached Phantom Ranch about 5 PM and staid all night.

Caught a rock rat about three feet long near our tent and put it in a gunny sack to be photographed in the morning. Scratched my finger on one of its teeth as I let go of it in the sack and drew blood but got no poison in and no more effects.



57.  
if I had scratched it on a pin.  
Sucked the blood out and after supper  
put a little Iodine on it to prevent  
infection and next morning could  
scarcely find the place.

Got some fine live specimens  
of the *Cnemidophorus tigris*  
and *Sceloporus clarkii* at the power house. A man  
there snared them for me with  
a noose on a fishpole.

Set 9 traps after supper and  
before I went to bed had 2  
*Neotoma lepida* in one trap and  
3 species of *Peromyscus* and a  
*Rhithrotaenium* in the others.  
Not a very hot day.

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July 28:- Got a fairly early start  
up the south side of the Canyon,  
after taking moving pictures of  
the rattlesnake and trying to  
get a chuck-walla.

Came back by way of Indian Garden  
where the Antelope are but  
saw only 2, The old buck and  
doe. The rest were off in the  
brush but these two were  
eating rolled barley in the shade  
by the rangers house and were  
so tame they would let me pet  
them and would not go out in  
the hot sun to be photographed.



The does very thin and not in good shape but the bucks is fine and smooth and plump. Both were feeling the heat badly and panting all the time in the coolest shade they could find. There is abundance of food for them, both green and dry and grass and browse they eat plenty of grain.

They have eaten all the leaves off a large rose bush as high as they can reach and are fond of the leaves of peach and apple trees and many of the native bushes. Short dry grass, Plantago, Fillaree, and many little green grass along the water edges are available as well as *Atriplex canescens*, *Eurotia*, *Chrysothamnus* and other browse plants.

Reached El Tovar about 4 PM  
tired but with a great feeling of  
accomplishment and full of the vastness  
and wonders of the Grand Canyon.  
Took a bath and got into clean  
clothes and rested ~~and after~~  
supper gave a talk on Carlsbad  
Cavern with a set of slides  
at the hotel.

They went down to the  
camp fire and heard part of  
a talk on Geology by  
Sturdivant. Next day.  
helped make up skins and stuffed  
the rattlesnake with sand.  
We then cooked and ate some of it  
and all agreed that it was good.



July 29:  
~~Aug 1~~

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Helped make up specimens  
and wrote and rested most of  
the day. Gave a talk on Callisno  
Cavern in evening at the hotel  
with a set of lantern slides  
found there and not being  
used. Then went down to  
camp fire and heard part of  
a talk on the geology<sup>++</sup> of the  
Canyon by Sturdevant  
Had an easy day and feel  
much rested up.

At 11 AM E. & W. H. Davis  
and his daughter  
and party of a dozen or so  
came to the Yavapai Point museum

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where they were given talks on  
the geology of the canyon by  
Sturdivant and M. E. Ku and  
then I talked to them on the  
animal life of the canyon and  
gave the Secretary's daughter a  
horntoad that I had picked  
up by the trail. At lunch  
in the El Tovar Hotel the  
Secretary called me over to  
his table where I enjoyed  
a delightful visit between  
him and his daughter.  
She had the horntoad in a  
paper box and when last seen  
on the train was catching  
flies for it.



July 30, Wrote letters & notes  
 and colored zone maps and  
 got out my lantern slides and  
 in evening gave a talk on  
 the Animal life of the Grand  
 Canyon country, illustrating  
 it with life zone maps, types of  
 vegetation of the 4 zones present  
 and then showing most of the  
 mammals of the region.  
 Had a good lecture hall in the  
 El Tovar, a good lantern and  
 most appreciative audience.  
 Had to stay nearly an hour  
 after the lecture to talk and  
 answer questions but gave  
 them the best I could.



Aug. 1 - Started for Flagstaff  
with Superintendent Tiltson  
and his daughters Gene and Eddy  
M<sup>c</sup> Kee by way of the Canyon of  
the little Colorado, the Cameron  
ranch and painted Desert,  
then back around the east side of  
San Francisco Mountains, about 85  
miles with fairly good road most of  
the way. Found the zone map as  
published in 1889 approximately  
correct but was able to define  
the lower Sonoran of the little  
Colorado Valley more definitely as  
not including all below the edge of  
the junipers and nut pines but  
restricted to the lower valley of the river.



The lower Sonoran of the little Colorado Valley is indicated by *Colocaryne sasasissima*, *Thamnosma montanum*, *Agave utahensis*, *Yucca angustifolia* with a two foot trunk as grows in lower part of Grand Canyon, *Atriplex* like *canescens* but the same as grows in the Grand Canyon and on Mohave Desert, *Echinocactus leontii*, *Cactus engelmanni*, *Opuntia engelmanni*, *Opuntia clavata*?, very spiny *Opuntia* with fine white spines as in Grand Canyon, *Atriplex confertifolia*, *Bigelovia* of 3 species, *Gutierrezia* of two species.

By *Crotaphytus baileyi*, *Sceloporus magister*, *Amphispemphiles cinerascens*, *Thomomys perpallidus*.

Generally the zone is very bare and somewhat mixed with upper Sonoran species.



Aug. 2. Prof. H. S. Colton in charge  
the Archaeological and general museum  
here at Flagstaff ~~took~~<sup>with</sup> his big Buick  
Car ~~and took~~ Eddy M & Kew and me  
up San Francisco Mountain on  
the new road now completed almost  
to the top of Agassiz Peak, a  
wonderful trip for scenery and  
life zone studies. McKee went to  
the top of the peak and we went  
well above timberline. Was  
The road winds up the south side  
of the mountain and around into  
the old crater east of the next peak  
south of Agassiz and then across  
the east face of Agassiz above  
timberline onto the saddle to



the north and <sup>47</sup> back along the peak.  
The grade is easy and wooded  
good, the last night's heavy  
rain had rolled a lot of rocks  
into it.

Found the life zone map approximately  
correct but made a few slight  
additions to it, adding more  
Canadian grass to the NE slopes  
of Eldon Mountain connecting  
Hudsonian over the saddles between  
the 7 peaks of the old crater rim.  
Our lower edge of Douglas spruce  
is also the lower edge of Aspen  
and *Pinus flexilis* and can well be  
mapped as Canadian while the  
spruce and fir zone above is mainly  
Canadian with the dwarf timber

of foxtail pine and *Pinus engelmannii*  
and *Abies arvensis* near the Hudsonian.

There seems to be no old snow  
on the peaks this summer unless  
on the N.E. side of Humphrey Peak  
where we could not see but a  
lot of fresh snow or small hail  
from last night's storm is  
still lying on cold upper slopes.

Found *Callospermophilus* and  
*Eutamias amoenus* and *Sorex*  
up to timberline and abundance of  
Clark's Crows, juncos and  
humming birds. Two band tailed  
pigeons swept close to us over one of  
the saddles at timberline.



Came back down to Prof. Colton's beautiful home on the mesa above Flagstaff and had a delicious lunch with the family, Mrs. Colton and a 14 year old son.

Went through Colton's laboratory where he is experimenting with piped white rats, moving the front feet at birth and studying the effects of piped life on bones and muscles of the rats through numerous generations. He has a well equipped laboratory with an assistant and is doing really careful scientific work. Also he is in charge of the museum at Flagstaff.

Mrs. Colton is an artist and has done beautiful paintings of the Grand Canyon, Painted Desert and many scenes of this region and has a remarkable studio of her own design, like an Indian adobe with all north light.

Their windows in the house are all picture windows with views of the San Francisco Peaks or out over the valley and big yellow pine forest, a most interesting pair and with a boy of quiet but original mind.



Aug. 3 - Left Flagstaff for home at 8:10 AM Santa Fe, Calif. Limited. Cool and pleasant after the rains and not hot all day, even in the Rio Grande Valley at Eschito and Albuquerque where we arrived at 6:15 and left at 7 PM.

There has been considerable rain all along and grass is good where not over stocked and over grazed.

The Little Colorado was over its banks day before yesterday and the water a foot deep in the bed at Winslow. Today it is down to a narrow stream in one side of the bed of the river.

Aug. 4 - A cold night over the Raton Pass and I wished I had a second blanket over me. Got up at La Junta in a beautiful bright world with fresh green all around out of doors. It has been raining and is a good year for stock.

Farther east crops are good and eastern Kansas is booming. It is pretty rainy and some crops are spoiled.

Reached Kansas City after dark.

A cool and comfortable day

Aug. 5 - Reached Chicago at 11 AM. Cool and Cloudy. Left 12:45.



53.

Aug. 6. Arrived Lansing, Mich.  
7 P M ed went to Downing  
Hotel for the night.

Aug. 7 - Out to North American  
Fur Farm to inspect pens  
ed cages where muskrats  
are being placed for breeding  
purposes, made exercise  
whirls ed suggested some  
changes in methods of handling  
the animals.

The lake where a pair of muskrats was found last  
spring contains numerous  
snapping turtles ed a  
few muskrats are ranging around  
it inside of the enclosure, ed

the muskrats are reported not  
very numerous.

Left for Washington 7:45 PM.

Aug. 7. Arrived Washington  
10 PM.